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Domestic Miscellany.

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OUR NAVY—No. III.

DETAILS OF THE SCHOOL-SHIP.

France, England, and Russia, nay, even the Grand Turk himself, has his Naval School. These schools, though severally conducted under different systems, agree, nevertheless, in this one principle, viz. that the proper teachers for officers, are officers. This principle is well known, and forms a striking feature in all military institutions. Divest the faculty at West Point of its military character, and what think you would be the state of discipline, and consequently, the national advantages, of that institution? Disrobe the chairs at Brienne and at Woolwich of their military cloaks, and what kind of soldiers, let me ask, would have been turned out upon the field to manœuvre the armies of France and of England? In the schools of *homeopathy*, the dogma is, that "like cures like." And this dogma reversed, becomes the doctrine which is every where preached, that, in normal schools, like begets like. Would you have a surgeon to teach sculpture; or a lawyer medicine? Neither would I have a landsman to teach a sailor the way of his ship over the sea; nor a citizen, from the walks of private life, to direct the education of officers for the navy. Give me for that your old sea-dog, whose mind is well stored with professional lore—who can instruct the reefer in the art of doing things "ship-shape and Bristol fashion," as well as "according to Gunter, and in man-o'-war style;" who can introduce the discipline and etiquette of the quarter-deck into the school-room; one who, in the course of instruction, can impart to the midshipman all the pride and feelings of the officer—excite him to noble emulation, and imbue him with the spirit of a sailor; so that the young aspirant, ere ever he has tasted salt water, can imagine himself almost "web-footed;" and, when domiciliated in his ocean-home, feel that he is indeed on his element. Such should be the teachers for our little school-ship.

It was remarked by the sailor-king of England, William IV., that the best school for educating gentlemen, is the quarter-deck of a man-of-war. Change the present system, so as to introduce the discipline of the quarter-deck below hatches, that it may be felt in the school-room, and the fact would soon become obvious, that the best school for training up sailors, and officers, and gentlemen, would be the little man-of-war school-ship of the Americans.

Under the present arrangement, the duties of the school-room, when one is to be found on board of a man-of-war, are subordinate to every other duty in the ship. There, the midshipman is practically taught to consider his attendance at school, as the matter of the least importance in his routine of duties. He is interrupted at his lessons to go on shore for the captain's pig; or he is called from recitation, to count the duck frocks and trowsers contained in the wardrobe of Tom Brown, the sailor. I have known a captain who forbade the midshipman to "work out longitude," on the ground that it was a secret of the captain and master; and, therefore, it was exceedingly officious, and unbecoming the character of gentlemen, for midshipmen to be prying into the rate and error of the chronometer, or to have any thing to do with the longitude.

If you reflect that all the authority on board of a man-of-war is in the hands of the captain and lieutenants—that the school-room, even when one is tolerated, is too often made the pretext, by many midship-

men, for avoiding duty on deck, or elsewhere—you may understand why the school-room is by no means considered in the light of a subsidiary to the discipline of the ship; but quite the contrary. Discipline is always, and deservedly so, a matter of the first importance on board a man-of-war. Upon it is based the efficiency of the ship, and even the safety of men and officers. On the captain and lieutenants depends a proper state of discipline, and they are held responsible for it. Discipline can only be maintained, by requiring from every one a prompt and ready response to the calls of ship's duties. And whenever, not heeding such calls, the luckless reefer urges for excuse his attendance in the school-room, the school-room is considered as a bore, and from that moment is looked upon too much in the light of a skulking-place for lazy midshipmen. Hence it is considered by no means discreditable to the midshipman never to be seen in the school-room; and many make it a matter of pride, never to enter there. Every officer is so fully convinced of the futility of attempting to teach midshipmen under present arrangements, that there is no one to take any interest in the matter. Even the professors themselves, when they come to understand the difficulties in their way, "go through the motions" of their duty, merely for form's sake—conscious that they labor in vain.

Education is a matter of primary importance, and it must be treated as such, else it will never flourish. That any school, either ashore or afloat, should prosper—among other requisites it is an essential one that the duties of the school-room should be of paramount importance. Hence, you may readily enough perceive how that education can never flourish under any system of instruction on board of one of our public vessels, where every thing is made to bend to the man-of-war; where the reefing of a topsail, the crossing of a yard, or the cleaning of a cutlass, is made a matter of more importance than the demonstration of every proposition in the six books of Euclid.

For this reason, I would set apart one of the idle ships in the navy for a school-ship. On board of that ship, the duties of the school should be paramount to all others; that is, she should be first a school-ship, and then the man-of-war. Every officer on board—purser, chaplain, master, surgeon, lieutenant and commander—every one, should have a chair assigned him, and take part in the duties and management of the school. The captain should be tactician, and, ex-officio, the president. Him I would hold responsible for the condition of the school-ship, and the proper management of the school, as he is now for the discipline and efficiency of a man-of-war. The chaplain should instruct in languages; the purser, in gymnastics; the master, in drawing and naval architecture; the surgeon, in chemistry and natural history; and the lieutenants, in mathematics, astronomy, natural philosophy, navigation, &c.

I have assigned languages to the chaplain, because his clerical character presupposes him learned in the *dead languages*; but I would none of them; the *useful, practical, living languages*, I advocate; first, that most difficult, arbitrary, and useful of all languages, the English; and after this, your French, or German, or Spanish. The study of languages constituting an important part in the education of a clergyman, it would appear that the duties of linguist in the school-ship might be more appropriately assigned to the chaplain, than to the officers of any other grade in the navy.

Gymnastics—particularly that department which includes the cunning art of fence, and the sailor's amusement of "single sticks"—I have assigned to

the purser; not from any peculiar qualifications which the officers of that grade are supposed to possess in this respect. It is not enough that the navy officer should understand the use of the weapon at his side, merely for his own sake. But when he goes to sea, he will find that "his division" would be doubly strong, if, in boarding and repelling boarders, they understand the broad-sword. He should be prepared not only to set them the example, but qualified to instruct them in the skilful use of the arms that are put in their hands. Therefore some officer should have especial charge of this department; and, if in the economy of the organization, it were not deemed expedient to raise the science of the sword to the dignity of a chair, I would assign gymnastics, including fencing, to the gunner; and the purser might take some other chair for which he is better qualified: international and maritime jurisprudence for instance. If that grade, in its present numbers, could afford no one properly qualified to fill such a chair, let it, with a purser's commission, be tendered to some one, ably competent, in civil life. I would make a similar tender of a master's commission to a naval architect and draftsman.

The twenty thousand dollars annually wasted under the present system, on professors of mathematics in the navy, if added to the pay, as navy officers, of the professors of the school-ship, would make the salary of these more than sufficient to command for the faculty the best talents the country can afford. Every professor should be a regularly commissioned officer of the navy—thereby placing him under military law, subjecting him to the rules and regulations of the navy—identifying him with the service, the more effectually to secure his interest in the school, and more surely to enable him to impart the proper *esprit du corps* to his pupils.

I assign the chair of chemistry to the surgeon, because the navy affords many officers of that grade, who could fill either that chair, or the chair of natural history and of philosophy, or the three, with great ability. It is an important item in the economy of the school-ship arrangement, that no branch of science should, ex-officio, attach to an officer of any particular grade. As professors, they should be all equal; one chair should be as important as another, whether filled by the highest or the lowest officer on board. But, as officers of the ship, every one should enjoy his appropriate rank.

Officers on board of such a ship, who have nothing to do with the school, would be like misplaced lenses in a telescope. There should be none to interrupt, or to confuse; but all should be engaged in the business of teaching, that the powers of all might be concentrated upon the one great object. Therefore you will observe that I have multiplied chairs, and distributed more professorships than under other circumstances might be thought judicious. But you will see sufficient reason for this, when you consider, that one important feature of the school-ship is to train up the young officer with proper ideas of the discipline on board of a man-of-war. Therefore, have all the officers on board of that ship, upon whom that discipline is to operate, and who have their part to perform in maintaining it; that the pupil may see it in all its bearings, and have continually before him a practical illustration of the wholesome effects—of the efficiency and strength—which a well regulated system of discipline imparts to the man-of-war.

Take for your school-ship one of our 74's that are rotting at their moorings—for a ship in ordinary decays as rapidly as a house without a tenant; and the putting of one of these in commission for a school-ship, would be an actual saving in arresting the progress of decay by means of more perfect ventilation and frequent cleaning of the ship. But if a 74, or a frigate may not be had, the navy will be content with a sloop-of-war, having simply a light deck thrown over her, and being lightly sparred and rigged, that the midshipmen may be taught to hand and reef; and,

in her annual cruise of two months at sea, constitute her crew proper.

Besides cooks and servants for the table, there should be on board ten or fifteen good seamen, as "a stand by." The midshipmen of the school should have an appropriate uniform, allowing free exercise and use of the limbs and muscles. They should be practised frequently at handing and reefing, at making and taking in sail, sending up and down top-gallant-yards, and the like. Every one should take care of his own hammock. They should, for the benefit of the exercise, and for other purposes, take frequent excursions in row-boats and in sail-boats, always their own oarsmen.

Those who were the best sailors, should be rated as captains of tops and other petty officers; those who were first in gunnery, as gunners' mates, &c.; and those who stood highest in their several classes, should be rated as master's mates; and thus an incentive would be created, and an inducement held out, for calling into existence, and for bringing forth, every quality that is becoming in the sailor or is graceful in the officer. If the navy were increased, as I have shown it ought to be, so as to allow a full complement of officers for every ship, the number of pupils in the school-ship, required merely to fill vacancies in the navy, would be about one hundred and fifty, supposing the period for graduating to be three years. This estimate is made on the supposition, that the admissions of each year would be lessened by fifteen, previous to graduation; and that the remaining number, in the course of three years at sea, would be attended with a still further reduction; leaving about thirty to fill the vacancies that annually would occur in the list of lieutenants, from deaths, resignations, dismissals and promotions. But if the school-ship were to cruise at sea two months in every year, the scholastic term might, with great advantage, be extended to four years; after which, a cruise of two years at sea, should entitle the graduate to an examination in seamanship alone; on which, if found qualified, he should be passed and promoted. Under such a system, you would see the service invigorated with young officers. We should then have boys for midshipmen and young men for lieutenants. You would no longer see gray-headed midshipmen, or superannuated grand-papas for young officers.

In this age of discovery, of invention and improvement—when nautical skill, geodetic operations, and every problem of science in whatever branch with which the mariner has to do, have been reduced to exact rules, or the process of solution greatly simplified, it is no longer a matter of choice whether the rising generation of our navy officers shall be properly educated or not. It will not do now for the navigator, when asked to point out the place of his ship at sea, to slap his out-spread hand down upon the chart, and say, *there*. His place on that chart is a point; and as such he must designate and mark it. A ready solution of the long-sought problem of longitude has been obtained; our means of observation have been multiplied; and new data have been afforded to us, by which latitude, as well as longitude, may be determined. Invention, discovery and improvement, are daily adding to the navigator's resources; and every officer should be familiar with the principles involved in each and every process by which longitude, latitude, or magnetic forces, may be determined; whether that process be simple or complicated. Before the facilities of the present day were known, many sought in vain to devise the means of procuring an artificial horizon at sea, as an adjuvant of longitude—yet a desideratum. Swinging chairs and hanging tables were proposed and tried, without success. But the most ingeniously impracticable method for the purpose originated with a Frenchman, who thought to accomplish the object, by fixing a circular mirror on the crown of a top, and spinning it on the deck of a ship at sea.

Magnetism too has been called on to aid in the solution of the grand problem of terrestrial longitude. Variation charts were constructed at a very early day. But modern improvements have invested this science, hitherto but little understood, with a new importance, and given it an interest which it never before possessed. As an auxiliary in the development of the laws of magnetism, charts have been also constructed to show the lines of equal inclination and intensity, as well as of variation. These lines, apparently of fanciful convolutions, and of arbitrary course and flexure, are found on examination to be governed by fixed principles; whether under the form of lines, asymptotes, lemniscates, or circles; or in the many "variations of conjugate oval, cusp, and node, in which the geometry of curves luxuriates," they are the exponents of magnetic quantities, regulated by mathematical rule, in obedience to certain laws of physics, which present research is seeking more fully to investigate. In his *magnetic storms*, Humboldt, a few years ago, discovered a new principle in magnetism, which, when properly investigated and fully understood, may lead to most important results; affording the means of determining longitude with an accuracy hitherto unknown. It is impossible to calculate the bearings on the economy of mankind, which the discovery of any new principle in physics is destined to have, however trifling that principle may appear when first revealed. The fall of an apple, and the motion of a frog's leg in the kitchen of a philosopher, have led to the most important results, and given powers to man, the extent and value of which, though already great, are not yet fully developed. The discovery of Humboldt has revealed, in the cosmical circulation of the magnetic fluid, the existence of a *pulse*, which is found to be synchronous in its action over all parts of the world where observation has as yet been directed to the subject. The beats occur at intervals, and, acting simultaneously on the needle every where, this discovery may constitute a natural telegraph, in perpetual operation, for the communication of longitude. Impressed with a sense of the importance with which this science has thus been invested, the Pacha of Egypt, and the semi-barbarous Rajah of a Hindoo province,* in concert with England, Russia, Belgium, Austria, Prussia and Bavaria, joined by a few private citizens of America, are at this time engaged in conducting a grand series of magnetic observations; of which Göttingen is the centre—the outskirts reaching from Siberia to a voyage of circumpolar navigation in the Antarctic ocean. With such an impulse and under such auspices, the laborers are already clearing away the rubbish in this branch of knowledge. The work of a few years past is throwing down the rude scaffolding of former theorists; and in its place something is seen rising up, like the pillar and spire of a less fanciful edifice, having the rigid but beautiful proportions of an exact science. Yet a course of magnetism constitutes no part of the professional education of the American navy officer. The midshipman, who seeks to become learned in the branches of science that pertain to his profession, and who, before the examining board, should so far stray from the lids of Bowditch, as to get among the isodynamic and other lines of a magnetic chart, would be black-balled as certainly as though he were to club-haul a ship for the board in the Hebrew tongue. Such is the present system, that the young officer finds but few incentives, and no official inducements, to undertake an extensive course of professional studies.

If you will examine the records of a mad-house among any commercial people, of little more than a half a century ago, you will find there frequent instances of men who had cracked their heads upon "longitude at sea." Large rewards, both by governments and individuals, were offered for the practical solution of this problem. It was even classed by some

with perpetual motion and the quadrature of the circle. Yet, now that it is understood, it is quite as easy for the scientific navigator to ascertain the longitude of his ship, as it was to resolve Columbus's problem of the egg, after the demonstration. And in these days the wonder is—not how the solution of the problem for finding longitude was discovered, but how it remained hidden so long; so obvious and so palpable were the means of the *quasilm*. The whole secret of the matter consists in knowing the difference between the time of day at the ship and at any other place. And (borrowing an idea from the beautiful simile of Dr. Wollaston) the moon is the hand of a great clock, placed by God in the sky, for this purpose. Therefore, he who can tell the time by the celestial clock, knows the longitude of his ship.

Another method, more simple, but less infallible and therefore not so beautiful, for determining longitude, is found in the substitution of a watch in the cabin of the ship, for "the great Greenwich clock in the sky." This watch is set by Greenwich time, and, supposing it to run correctly, always shows the true time at the royal observatory. Then all that remains to be done for finding longitude, is to tell the time of day by observation at the ship. But how can the place of a ship at sea be known, by reflecting the sun in a little mirror, and bringing its image to the horizon? Or how can it be discovered, by looking through a brass tube at the moon, and moving an index along the arch of a sextant? What (it may be asked by those unacquainted with the principles) have the sun and moon in the sky, or those things in the sextant, to do with a ship on the ocean? When told of augmentation, semidiameter, dip, parallax and refraction; of the equation of time, of horary angles, azimuth circles and zenith distances, right ascension and declination; of the inclination of the orbit of the earth, and of the foci and conjugate axes of an ellipse, &c.; and when the spherical principles involved in the calculations are mentioned, the catholic proposition, the circular parts, the product of radius and "middle part's sine," extremes conjunct and disjunct, and the final process of $x - y = \&c.$, the young officer unacquainted in mathematics, becomes dispirited at the difficulties in the way of his understanding the lunar problem. There is no one to encourage, or to expound to him the analytical symbols of algebra, and to guide him among the mystic circles of the sphere; hence, many a time, the energies of his young mind are turned awry, and lose the name of action. Therefore, without knowing whether the *data* and *quasila* of the lunar problem be arcs or angles, it is often, very, very often, the case, that midshipmen, turning to Bowditch, commit to memory the formula of his first or second method or "finding the longitude at sea by a lunar observation." Thus crammed, or "drilled," as it is called, they go before the Board of Examination, where, strange to say, there is a premium offered for such qualifications. He who repeats "by heart" the rules of Bowditch, though he does not understand the mathematical principles involved in one of them, obtains a higher number from the Board, than he who, skilled in mathematics, goes up to the black board, drawing his diagram, can demonstrate every problem in navigation. And, as merely to pass is the great object with many, you may well imagine how low the standard of mathematical attainments is thus brought under the present system.

I once had a friend who possessed considerable attainments in mathematics. Therefore he cared not to commit to memory the rule for working any mathematical problem, but took pleasure in solving each of the various problems in navigation, according to the strict principles of mathematics. He thought to gain credit for those attainments, and relied on them to carry him safely through this branch before the Board of Examiners. When put upon his examination for promotion, and questioned as to the lunar pro-

* London Quarterly Review, No. CXXXI.

blem, he pretended ignorance of the first and second methods of Bowditch, which, in those days, the candidates were merely required to repeat by rote; but, stepping up to the black board, he drew the diagram, and proceeded to treat the problem as a proposition in spherical trigonometry. The mathematical examiner floundered in the midst of the demonstration, the midshipman insisted, and they appealed to the Board. But no one of these being capable of judging between them, my friend was unanimously voted wrong, in spite of a mathematical truth. One of the members rose from his seat, and, with a magnificent air, advised the poor fellow to go to sea and study his profession. A knowledge of mathematics, like the legacy to Dickens' Cobbler, had "almost worked his destruction." It proved a rock on which he struck, and had well nigh "bilged," for he found that by differing with those "potent seignors" he was kept out of promotion for nearly two years. However, when the merits and qualifications of those who had appeared before the Board were made known, he had the satisfaction of finding, that though he himself had not been considered well qualified to pass, he had proved a most excellent teacher; for all those whom he had drilled passed high up the list, and with great eclat. Therefore, if you have any young friend in the navy, preparing for the ordeal of examination, advise him to adhere to the rules as they are laid down in Bowditch—to commit them to *memory*—and not to attempt to *understand* the mathematical principles on which they are founded, for such information will profit him nothing under the present system.

In Lord Anson's time, less than one hundred years ago, the only means of ascertaining longitude at sea was by the "log," which is a chip thrown overboard with a string tied to it. By it is told the rate at which the ship is going through the water, but not over the bottom. It was then no uncommon thing for the reckoning to be 15° or 20° out of the way. I have myself seen those who kept "dead reckoning," reckon their ship on top of the Andes. Lord Anson, when navigators had not the facilities which are now afforded for correcting dead reckoning, came near running his ship ashore at Tierra del Fuego, though he thought himself 9° or 10° to the westward of it. And one of the ships of his squadron actually made the land on the side of the continent opposite to the side on which he judged himself to be. And since Cook's time, which is much later, an error has been discovered in the means then afforded of finding longitude by lunar observations, which produced an error of thirty miles in the longitude.

Although the mathematical solution of this problem requires the simple addition of but eight logarithms, division by two, and the subtraction of one logarithm to give the true lunar distance, wise men and astronomers have tortured their brains in search of a process for finding longitude at sea, less operose and more practicable than this. And there are now outstanding large rewards, proffered by one or more societies in England, for the discovery of some such method. Both governments and societies have acted unphilosophically in this respect. They have attempted to rob the science of navigation of its charms, by seeking to strip from it the attributes of intellect, placing it thereby on a level with the capacity of the unlettered mass of mariners. That these efforts have been attended with success, to a certain degree, is true. But how far the science of navigation has been advanced, or the safe conduct of ships promoted, by making the solution of most problems in the science a mechanical, instead of an intellectual, operation, let others determine. For the sake of dispensing with the use of one or two logarithms more, in the solution of the lunar problem, to intrust a long rule to the memory, at the expense of the understanding, may sometimes be of individual advantage; but it is doubtful whether it has resulted in giving that nicety to the calculations of the navigator, which the knowledge

necessary to a proper mathematical solution is sure to impart. Therefore it may be considered very problematical whether the world in general, and navy officers in particular, have been benefitted by this "simplifying process." If, instead of such measures, steps with the same zeal had been taken for the diffusion of knowledge among seamen, so as to raise among them the standard of attainments for the navigator—placing him thereby on a level with the science of his art—this problem would long ago have ceased to be considered difficult and tedious; and then the philanthropic end for which the rewards were offered would have been more than accomplished. For as it now is, an expert navigator—one who is accustomed to the logarithmic solution of mathematical problems—can perform the whole operation in ten minutes; and there remain to him, beside, all the collateral advantages of his mathematical attainments, derived in the necessary course of previous instruction.

The process of finding longitude by chronometer is less tedious and more simple. It has been brought to its highest perfection in our own day. It *supposes* the chronometer to run at a previously established and uniform rate during the longest passages at sea. Therefore, though the structure of these instruments has been brought to a wonderful degree of accuracy, longitude by chronometer can never be implicitly relied on; and the longer the passage, the greater the probable amount of error. Though there may be perfect agreement between two or more chronometers in the same ship, this does not prove the longitude correct, but only makes it less doubtful. And though a chronometer may run correctly for ninety-nine days, or as many passages, it may change on the hundredth, and the confidence which it before inspired prove the rock on which the ship and all hands are lost.

But there is a means of testing chronometers at sea, which is not unfrequently, but by no means generally, resorted to, viz: that of a lunar observation. The moon, though emblematic with the poet of all that is fickle and changeable, is, to the sailor, ever constant and true. For his use, she controls the tides; and, ever "chiming to the harmony of the spheres" for him, at every moment she writes with her silvery pencils in the sky the place of his ship on the ocean. To read the writing on that blue scroll is the highest and the most beautiful accomplishment that can be practised by the mariner on the deep. Among the wonders and mighty works seen by those "that do business in great waters," there is not one more striking and grand, or more sublimely eloquent, than this. An expert lunarian may always rely, within five miles, on his observation; but allowing ten miles to be the limit within which ordinary skill will bring every one, the navigator has always within his reach, at sea, the means of detecting any error in his chronometer, beyond certain limits. Even that degree of proficiency is not difficult of attainment, which will enable him to ascertain, with a wonderful accuracy, the error of his chronometer, and even to assign for it a new rate at sea.

Do not imagine that I disparage the great body of those who navigate the ocean, or that I would under-rate the attainments of our navy officers. The latter, entering the service at fourteen or fifteen years of age, and before the groundwork of education in their young minds is completed, have difficulties in the way of their education, which none but they themselves can understand. And it is surprising how, in the face of such difficulties, they should ever become the accomplished and intelligent officers and gentlemen, they are known to be. It too often happens that, after six years of service, there appear before the Board to be examined for promotion midshipmen, who are required to "work ship," manœuvre fleets, and fight battles on paper; when it is known by the Board that many of them have never been permitted so much as to tack a ship, or load and fire a gun. And as for the "great body of navigators" not being

properly instructed in the science of their profession, I might, by way of illustration, cite the case of one of the most accomplished seamen who command the Liverpool packets of New York. He tried the experiment of navigating by two chronometers. But they, having separate errors and rates of course, only served to confuse him, as he said, by "making a bo-theration in his longitude;" and as the shortest way of getting rid of this difficulty, he put one of the chronometers in his drawer and locked it up. To this day, many of the traders from Boston and New York to the West Indies, make their voyages without any means whatever of ascertaining longitude. On their outward bound passage, they steer due south till they make the latitude of their port, and then steer due west—thus sailing along the legs, instead of the hypothenuse, of a triangle. That numerous and valuable classes of vessels, known under the patronymic of "coasters," is seldom—indeed I have never known an instance of one being—provided with any nautical book, chart, or instrument whatever, except the compass and the lead, or, as they call the latter, "the blue pigeon." If you would see some of the practical disadvantages of their rude method of navigation, look to the Jersey shore; or go to our own Southern coast. Hundreds of wrecks strew the beach between Hatteras and Henry. And what are they, but monuments to navigators who have lost their reckoning?

A year or two ago I coasted along that shore. The beach, a few miles from Cape Henry, all the way to Cape Hatteras—I might add to Cape Lookout, but particularly to the north of Hatteras—was literally lined with wrecks. Eight or ten were often seen at one view—but never less than two or three—dotting the beach, or the foam of the breakers, with their black and riven hulls. Some lay dismasted in the edge of the rollers; some, not yet gone to pieces, were wallowing in the surf. The crew of one that had just gone ashore were seen pitching tents of her sails on the sand, and were endeavoring to land the cargo. Most of the wrecks had gone to pieces. But there was one—a nice little schooner—which had been thrown high and dry several yards from the water, and was standing upright in the sand, with masts and rigging complete. The little turrets that were seen from time to time peering up from behind the sand-hills, told to the fancy many a silent story of false beacons, wrecks, and plunder. The legends of the coasting trade abound in shipwrecks and "cast-aways;" in tales of false lights, murdered crews, and pillaged ships. According to these, the wreckers along some parts of our coast are as savage and as merciless as ever were those on the coast of Con-naught.

Undertaking to classify the human race, and to compare the mortality incident to the followers of the different trades and professions, every one remarked, that he knew not whether to class the sailor at sea with the living or the dead. But the dangers incident to the sailor's calling, are not all owing to the winds and waves. If the immense losses of life and property that annually occur among ships could be traced to the true causes, it would be found that a large proportion of them could not be fairly ascribed to the "dangers of the sea," but rather to reckonings lost, and bad navigation. As a work of benevolence with the humane and philanthropic, and as a matter of interest among insurance offices and merchants generally, it deserves consideration, whether some effective means may not be devised, and put in execution, for raising the standard of the merchant captain's qualifications, and for having every vessel supplied with the instruments and persons necessary for safe navigation. The vessel is one, too, of national concern, and therefore commends itself also to the consideration of the patriot and statesman. With these the means are ready, simple, and economical, and would be abundantly supplied by a well-regulated

school-ship. The number of pupils already proposed to be there entertained might be increased, so as to extend beyond the immediate wants of the navy, and reach our commercial marine—supplying this last, in times of peace, with a body of highly educated, well-trained, and skilful officers, who, in war, would constitute a corps of reserve for the navy. However great may be the powers of expansion, which the navy of such a commercial people as this may possess with regard to ships and seamen, the power of a corresponding increase, with regard to well-trained officers, is wanting; nor has the navy been ever endowed with the means by which this power may be obtained. Six years of schooling and training are considered necessary to prepare a midshipman for the duties of lieutenant; and six years, then, must be the time which, in any emergency, under the present system, must elapse, before any increase above the usual ratio can take place among the commissioned officers of the navy. In war, the merchant service would afford hundreds of vessels and thousands of seamen for the navy. In less than one month after a declaration of war, scores of armed schooners, brigs, sloops, and corvettes, superior to any vessels of their class in the last war, might be bought, equipped as men of war, and sent against the enemy, could the Government spare from the navy proper officers to command them. Possessing, beyond dispute, the finest commercial marine in the world, is it wise entirely to neglect every course of policy, or totally to disregard every measure, which shall render available in war the very great advantages to be derived from such a resource? The question needs no reply. Suppose that a greater number of pupils were admitted in the school-ship, and permitted at the end of six years to be examined for promotion, than should barely be sufficient to supply the navy with its yearly quota of officers? Striking a balance between the merits and demerits of each one, let those having the greatest number in their favor be commissioned as lieutenants in the navy, until the yearly number of vacancies should be filled; then let certain inducements, if necessary, be held out to the others, for entering as mates and masters in the merchant services, with the understanding that they shall be received back into the navy as lieutenants, should a state of war, and the exigencies of the public service, render it necessary to call on them. It cannot be doubted that the advantages of their education, their high-toned moral character, and gentlemanly bearing, would soon gain for them the preference of ship owners. Without such advantages in their favor as the school ship would give, we find half-pay officers of the royal navy already in the enjoyment of a like preference with the shipowners of England. They are sought for the command of East Indiamen; they are preferred for all distant and important voyages; and we find the Great Western, and other of the English steam-packets, commanded by navy officers, who are now becoming acquainted as pilots with our principal ports; and are acquiring a fund of information, that in war would prove most valuable to their country, and injurious to this. *Verbum sapientibus.* Ceasing, then, to be at an expense to the Government, these schoolship officers would find employment, at once honorable and profitable to their country and themselves; they would reflect credit on the wisdom of their Government; and serving, by the force of example, by their skill, and the tone of their character, to raise the standard of the shipmaster's attainments, they would make still more respectable that already highly respectable class of men, and add to the safety of American ships at sea. Trained in the man-of-war school of discipline, their employment in the merchant ship would daily increase their experience as seamen; by the force of early habits and of education, all their predilections, whenever a state of war should interrupt them in their peaceful pursuits, would be in favor of the navy, and to it they would naturally look for employment,

By these arrangements, every man-of-war, in time of peace, may be furnished with her due quota of midshipmen; which cannot be the case under any system, unless the yearly rate of appointments greatly exceed the yearly rate of promotions. Thus, at an expense too trifling to be taken into account, a corps of reserve of well trained officers may be created for the navy, and maintained in constant training ever afterwards, without the expense of a single dollar to the public treasury. Commending this subject to the reader for reflection, with the promise to enter more fully into the discussion of it at another time, let us return from the merchant service, and the "corps of reserve," to the navy proper:

One of the most intelligent officers of the navy writes: "I have written to the committee on naval affairs, to urge the necessity of a more perfect reorganization of the navy." The letter concluded with the avowal of the conscientious belief, that "rather than the present system should continue, it were better to dismantle and sell the ships, and turn the officers adrift to seek a livelihood; for many of us feel that we are instruments, (unwilling instruments, it is true,) nevertheless we are instruments for deceiving and defrauding the public." This is by no means an uncommon sentiment, or a partial feeling among the officers. By the act of 1814-15, a dose of slow poison was administered to the navy. The navy has lingered and pined under its operation, until its effects have been felt in every member of the body. Never before has the spirit of discontent, among all grades in the navy, walked forth in the broad light of day, with half such restive but determined steps. The period is fast approaching, when something must be done to stay the evils of the deranged system. Officers, and the friends of the navy, have forbore, until forbearance has ceased to be a virtue. They feel that to remain longer silent with the navy in its present condition, would be but to betray the interests confided to them by their fellow-citizens.

The navy, as at present organized, may be compared to a ship without discipline—the officers, to her crew. One captain has been relieved by another; only to perpetuate the evils of the system. "Skulks, and lazy louts," have been made the first and second captains of the main-top. The best men in the ship have been "black listed and put in the waste" without cause. Before the crew of one gun has been properly exercised, or well drilled, the whole division is thrown into confusion—some have liberty to go on shore—some are stationed elsewhere—and others put in their places, only to be severed in like manner. All is in confusion, and there is no system in any thing on board, except in the bad management of every thing. If a mast or a yard be sprung, the cost of repairing it is more than the expense of a new one—yet it is repaired. The most wasteful expenditures are made in some departments, and others are grossly mismanaged. The crew have remonstrated, have stated grievances, and threatened exposure. But ears, as deaf as the breakers towards which they are drifting, have been turned to their entreaties. And in the face of such things, official reports continue to be made to the owners of this ship, that she is in excellent order, and in the most efficient state—that the most rigid economy, perfect management, and wholesome discipline obtain in every department—and that all's well on board. With such a picture of the navy, does the feeling among the officers, "that they are made instruments for deceiving and defrauding the public," appear over nice and fastidious?

[Concluded in our next.]

From the Richmond Compiler.

SOUTHERN LITERARY MESSENGER.—We have been greatly delighted, and have enjoyed a rare treat, in perusing the pages of the December issue of this increasingly interesting periodical. This number completes the sixth volume.

The former numbers of the "*Scraps from the Lucky Bag*" have raised the author of them high in the estimation of his countrymen. The present number is calculated greatly to enhance his reputation. The subject is one about which no American can feel indifferent. Until we can forget Hull's achievement upon the sea, and Perry's upon the lake, we cannot be unmindful of our navy. The exploits of our "brave tars" constitute too bright a page in the annals of our renown, for us to be regardless of their interest and their wants. And there are, in these "Scraps," many suggestions, connected with our navy, that deserve our best reflection and most mature consideration. The whole article is one of exceedingly great literary merit. The author gives indubitable proofs of great ability, and of unusual attainments in science and general knowledge. But his powerful exposition of the present condition of the navy, and of the means which ought to be used to render its future condition such as it should be, must arouse the attention of the whole country, and lead to proper and wholesome action. The defects in the past and present management of this arm of the national defence, are clearly pointed out, and proper remedies are eloquently suggested. The most powerful of other nations having naval schools, the propriety and necessity of our having such establishments is shown. The money which is already appropriated for the purpose of educating our naval officers, might be of incalculable importance, if used in carrying out the plan proposed in the "*Scraps from the Lucky-Bag*." There is also a proposition for a corps of reserve for the navy. This suggestion is worthy of the greatest attention. If properly acted upon, it may result in promoting the interest of commerce, in throwing greater safeguards around the life of the sailor, and in the accumulation of means, that may be necessary, in the hour of trouble and danger, to preserve the honor and glory of the country. These "Scraps" are full of valuable information. We understand from the editors of the "*National Intelligencer*," who noticed the former of these "Scraps from the Lucky Bag," some months since, that Lieutenant M. F. MAURY of our navy, is the author of them. This talented and accomplished officer ought to be at the head of our Navy Department. He has all the necessary qualifications; and, we have no doubt, he is better prepared to infuse life and energy into the whole navy, than any other man in America. He has both a practical and scientific acquaintance with the whole subject. He knows the wants of the "navy." He knows what is necessary to supply these wants. If a naval officer, so able and well informed as the "Scraps from the Lucky-Bag" prove Lieut. Maury to be, were placed in the office of Secretary of the Navy, great benefits, in all likelihood, would result to the country from his performance of the duties which would devolve upon him; and we hope the first opportunity will be taken to call his talents into requisition.

[The above criticism is from the pen of a gentleman of extensive literary attainments and fine talents, to whom our copy of the Messenger was submitted, our duties not leaving us time to enjoy the treat it affords. His sentiments and opinions are entitled to high consideration, much more than our own. The recommendation of Lieut. Maury for the Secretaryship of the Navy will no doubt startle the reader, as political and party considerations so generally control selections for office with us, that no man out of the field of politics is thought of for office. If these considerations be suspended with regard to the navy; who, may we ask, is so well acquainted with that branch of the service, its defects and its wants, or better fitted to devise measures to preserve untarnished its honor and glory, than a son of the navy? If such a one is to receive the selection, we feel confident that it could fall on no one more deserving or competent than Lieut. Maury.—Editors Compiler.]

SOUTHERN LITERARY MESSENGER.—The number, for the present month, of this excellent periodical comes to us freighted with a rich cargo of assorted articles. With a proper appreciation of several of the other communications, we must, however, direct especial attention to the article upon the navy—one of a series upon that subject, which ought to be laid upon the table of every member of Congress and engage the thoughts of all who feel an interest in that important arm of the public service. It proceeds from a mind full of information, theoretical and practical, upon the subject, and deeply interested in the prosperity and glory of the navy. We need say nothing to enforce the writer's views—our only object is to beg for them a more than usual attention.—*Fredericksburg Arena*.

THE SOUTHERN LITERARY MESSENGER for December is a valuable number. Among a great variety of articles, in prose and poetry, some of which are very excellent, there is one on "Our Navy" which is worthy of especial attention. The author, who seems to be "a sailor," urges the establishment of school ships for the navy, and explains and enforces its propriety with much ability and cogency. He exposes the evils of the present arrangement and shows that our naval education is not equal to the improvements, discoveries, and inventions in navigation, &c. nor commensurate with the spirit of the age. The writer also urges the necessity of a more perfect reorganization of the navy, &c. &c. We will, if practicable, hereafter lay a part or the whole of this article before our readers. We are glad to see a proper spirit rising in regard to this branch of the public service.—*Madisonian*.

THE NAVY, PROFESSORS OF MATHEMATICS, &c.—The reorganization of the navy of the United States with a view of placing this great bulwark of the protection of the republic against foreign aggression and invasion on a permanent basis, and on a footing corresponding with the great national interests which it is required to protect, is claiming (as it justly merits) the attention of leading journals in different sections of the Union.

The Boston Post of the 23d ult. contains an interesting article on this subject. The Post says that ever since Mr. Jefferson's famous gun boat project, what is called the democratic party has been accused, unjustly, of being unfriendly to the navy, and that that system, as is now conceded, was injudicious and inefficient. That during the late war with Great Britain, the navy gallantly fought its way into notice, and triumphantly demonstrated its ability to cope with our haughty foe in his own element and with his own weapons. During Mr. Madison's administration "the bill to provide for the gradual increase of the navy" was passed, and this favorite branch of the public service received an impetus which was only retarded, not arrested, by the treaty of Ghent and the general pacification of Europe.

The people of this country very properly insist on a just and economical administration of the affairs of their own government, but at the same time, with a wise precaution and an enlightened sense of their own interest, they have always and do now insist that the naval force of this country shall continue to increase and be strengthened and enlarged, until it attains a size and efficiency fully adequate not only for the protection of American commerce in every navigable sea, but for the defence of our territory and the vindication of our national honor, if ever assailed by the most powerful nations of the globe.

To ensure it a position of respectability in peace, and of efficiency in war or any unexpected emergency, it behooves the new administration to mature and carry out whatever promises extensive public usefulness, which *has been or may be* commenced or devised by the existing administration.

The system of naval apprenticeship owes its estab-

lishment, we believe, to the present Secretary of the Navy, and we can say, from a personal observation of its actual operation at this naval station, that if generally adopted and efficiently carried out, it will not only essentially contribute to the future efficiency of the service, but that it will operate as a great moral and intellectual agent for the improvement and amelioration of a most interesting class of the rising poor but meritorious youth of this great nation.

There is another subject connected with the interest and well being of the navy, which we have been intending to touch upon and which we believe, was recently briefly adverted to by the Baltimore American, to wit, the institution of a professorship of mathematics on board our national vessels while at sea as well as in ordinary.

The youth of the country are put in the navy at an early age and with the mere rudiments of education; how necessary and important then that there should be a competent instructor to train intellectually the future Perrys, Decatur and Lawrences, of our country. To do this efficiently the office of instructor should have a regular and honorable *grade* in the service. The professor should hold a permanent *rank* in the navy, and if he is a moral and intellectual man we should hold him in much higher estimation, than many of greater pretensions but less merit. We intend to recur to this subject and to discuss it more at length.—*Norfolk Beacon*.

CAPTAIN REYNOLDS AND LORD CARDIGAN.—The general sympathy excited by the oppressive sentence upon Captain Reynolds is almost unparalleled. We never remember a case of an individual becoming in so short a time, the object of such general interest. With the feeling now existing in his favour, it is impossible that the affair can stop where it now is. To the House of Commons the people will look for justice. No other power in this country has the right of removing or punishing an unjust Judge, and it is to our own representatives that we shall have to turn for satisfaction in this matter. Lord Hill, we hope and trust, will receive at their hands the mercy he has dealt to others. While we admit that it may be the duty of the court-martial, in some way, to punish Captain Reynolds for his hasty epistle to his commanding-officer, we entirely repudiate the ungentlemanlike and un-English doctrine promulgated in their postscript. We maintain, that in many cases a soldier is not only excused, but justified, in resenting, in a proper manner, the conduct of his superior officer. With our opinions on the subject of duelling, we blame Captain Reynolds for having written a challenge at all, but we blame more the spirit in which that challenge was written. The sum and substance of his guilt, in the public eye, is, that, under high provocation, and smarting under a sense of injury, he did not pen precisely such a letter as a cool observer would have dictated for him; and for this he has been degraded from his rank, and fined to an amount which, if he be a poor man, may ruin his prospects for ever. And Lord Cardigan, the origin of all this evil, the aristocratic gentleman who gives the lie to his subordinate gentlemen, and then commands them to have no communication with him, except officially, what has been the measure of justice accorded to him? He has been gently admonished; told that all this could not have happened without some fault on his part; and left free to break a few more Captains and ruin a few more families who have no hereditary claims of sympathy from the Commander-in-Chief. The Memorandum of Lord Hill, now officially published, is bad altogether. The forced admission of the culpability of the Lieutenant-Colonel is a peculiarly bad accompaniment to the assurance, that no complaints of his conduct will be heard. It shows more and more strongly the resolution of Lord Hill to maintain the Earl of Cardigan through good or evil report. Rank covers a multitude of sins at the Horse Guards.—*Liverpool Albion*.

WASHINGTON CITY,
THURSDAY.....DECEMBER 10, 1840.

"OUR NAVY."—As well from the intrinsic merits of the production itself, as from a desire to gratify our naval readers, who will all doubtless be anxious to see what is said by a writer whose previous numbers attracted general notice, we have transferred to our columns from the Southern Literary Messenger for December, the third number of the articles on "Our Navy"—or, as they are quaintly termed in the Messenger, "Scraps from the Lucky Bag," ascribed to the pen of Lieut. M. F. MAURY.

Owing to the late hour at which we obtained a copy of the Messenger, we have not found time to read the 'Scraps' attentively. We publish them without any reference to our own opinion of their merits, for the gratification of our readers, who are competent enough to form their own opinions, without our aid.

The press throughout the country has spoken in terms of high commendation of the previous essays of this writer; and the few that we have seen of the present one, particularly that from the Richmond Compiler, are eulogistic in the extreme. Awarding to Lt. MAURY (if he be the writer, of which we presume there is no doubt, as it has not been denied,) what our personal acquaintance with him fully warrants, great worth as an officer and a man, and fine talents as a scholar, we cannot but think that his friends do him a serious injury by holding him up in such extravagant terms of praise. There is so much envy in the world that the mere possession of superior acquirements naturally draws towards the individual gifted with them feelings of dislike or repugnance from the mass; but when these acquirements are held up for universal admiration by indiscreet friends, sneers and doubts will be indulged in by the less fortunate; none will acknowledge that the whole service can boast of but one individual of pre-eminent abilities.

The suggestion of the writer in the Richmond Compiler, that Lieut. MAURY would be a suitable person to fill the post of Secretary of the Navy, is one that will probably only meet with ridicule from the officers themselves, and may operate to the disadvantage of that meritorious officer, by inducing others to underrate or disparage his talents. Lieut. M. is in a fair way to acquire fame and distinction, if not spoiled by adulation; and if he persevere in a judicious course of study and observation, maturing his judgment, and adding to his experience, there is not a doubt that, *twenty years hence*, he will be amply qualified to fill the station which some (we might say ill-judged) friend has prematurely pointed out for his aspiration.

The age of Lieut. MAURY would form an insuperable objection to his appointment to so elevated a station. There are men in the navy old enough to be his grandfather, and it is expecting more of human nature than it is capable of enduring, that men so

much his seniors in age, and better qualified by experience, would remain passive under the control of one so young. The name of an officer of the highest rank known in our service has been mentioned in connection with this place in the cabinet, but even his selection would not be brooked by the navy at large.

It requires something more than a knowledge of the wants of the service to manage properly the affairs of the navy; for this, many officers possess, and all who have been observant ought to be familiar with them. But it needs a matured judgment, a knowledge of human nature, an acquaintance with the foreign relations of the country, and a firmness of purpose to carry out plans which, after due reflection, have been decided upon.

But we are discussing a question upon which there may be no necessity for expressing an opinion. The proposal, however, struck us at the first blush, as so palpably absurd, that we could not refrain from uttering a few of the sentiments that came uppermost.

Towards Lieutenant M. we have the best feelings of respect and good-will, and he will not consider it unkind in us that we should discourage any expectations that he may have formed, through the well-meant intentions of injudicious friends, of a too sudden elevation in political or professional life.

Last Monday was the day for the meeting of Congress, but in consequence of a snow-storm, almost unprecedented in severity so early in the season, neither House formed a quorum on that day.

A quorum was formed in the House on Tuesday, but not in the Senate.

In our next we shall present to our readers, as customary, so much of the President's Message as relates to the army and navy; and in succeeding numbers shall insert the reports of the Secretaries of War and the Navy.

ARRIVALS AT WASHINGTON.

Dec. 2.—Capt. B Huger, Ordnance, Mrs. Latimer's
Col. J G Totten, Corps Engrs., Gadsby's Row
Lieut. B H Hill, 1st arty, Capitol Hill
Lieut. T B Linnard, Top. Engrs., Fuller's
5—Lieut. W H Fowler, 1st arty, Col. Fowler's

LETTERS ADVERTISED.

PHILADELPHIA, Dec. 1, 1840.

ARMY.—Capt. E Harding, Lieut. J H Hill, Capt. B L Beall.

NAVY.—Mid. R B Riell, Charles Hunter, Lt. W H Noland, Rev. T [R] Lambert, Mid. A H Jenkins, John Mooney, 2.

MARINE CORPS.—Lieut. A S Taylor, Lt. L Searcy.

PASSENGERS.

SAVANNAH, Nov. 29, per steampacket W. Seabrook, from Charleston, Lieuts. F. Hamilton, R. P. Campbell, and D. G. Rogers, 2d dragoons, U. S. A. Dec. 2, per ship Zenobia, from New York, Lieut. Col. G. Loomis, Major W. L. McClintock, Mrs. Capt. Casey and Mrs. H. W. Wessels, child, and servant; Major T. Childs, Lieuts. W. H. Churchill, H. W. Wessels, B. Bragg, F. O. Wyse, R. F. Baker, W. Gilham, S. Van Vleit, G. H. Thomas, D. S. Irwin; Surgeon R. S. Satterlee, and Ass't Surgeon J. K. Barnes, all of U. S. A., and 205 recruits for 3d regiment arty. Dec. 3, per steamboat Charleston, from Pilatka, Lieut. G. W. Wallace, of the army.

Communication.**FLORIDA WAR.**

Remarks upon the letter of a correspondent of the Army and Navy Chronicle, on the obligation of officers to assist their men on the march, when swamped or in difficulty.

Nov. 4, 1840.

MR. EDITOR: I have just seen the Army and Navy Chronicle of the 27th August, and have read the communication from your correspondent, dated Florida, July —, 1840, and now write only to notice one paragraph of that communication, viz:

"You don't know how provoking it is to sit down on a log in the rain, while the men are hauling your wagon and mules out of a swamp, and think of the proceedings of Congress, which you have read probably the day before; how Mr. so-and-so spent half a day in stating that he had been misrepresented in some newspaper. At such times I think to myself, there is a man who gets \$8 a day for talking; and here is a poor soldier who gets \$7 a month for working like a beaver."

I, Mr. Editor, can't help thinking to myself, what sort of an officer was he, who would "sit down on a log in the rain, while the men were hauling his wagon and mules out of a swamp?" How much did he get "a month," for "sitting on a log," thinking of any thing but his duty, while the poor soldiers were hauling his wagon and mules out of the swamp? You might have spared yourself the trouble of saying in one of your notes to your correspondent's communication, that "the writer does not belong to the 6th infantry." All who know that gallant regiment, (especially in years gone by,) know that it is not characteristic of the officers of that corps to sit down with their arms folded and be thinking of something else, when their men were in danger or difficulty. An officer of the 6th infantry would not have been found squatted upon a log; he would have been found in the swamp, in the mud, with his men, giving his orders and instructions, and encouraging them by his presence and example, if not with actual labor of his hands, to renewed efforts to extricate their team from its difficulty. Often have I seen the officers of the 6th infantry, from its commanding officer, the gallant LEAVENWORTH, down to the very youngest sub. whilst ascending the Missouri, in 1825, instantly leap overboard with the men when their boats would get aground, and assist in lifting and shoving them afloat; often have I seen them on the cordelle, with their men sometimes waist deep in the water and sometimes as deep in the mud, and this not once, nor twice, nor thrice, but half a dozen times a day, almost every day in the week; in like manner often have I seen them with their men waist deep in mud and water, whilst ascending the Wisconsin, in 1827. Often have I seen them, in 1832, deep in water and in mud, assisting their men, sometimes with their own hands, always by their presence and example, in extricating their pack horses from the mire; and this was no little job, for upon some of those occasions I have seen, militia and regulars, hundreds of men and horses mired down at once, and this too in a thick set briary swamp; but I never knew an officer of the 6th, upon such an occasion, to sneak off and "sit upon a log," and leave his men to get out of difficulty the best way they could.

The writer of this is

ONE OF THE COUNCIL BLUFF SOLDIERS,
OF THE 1ST INFANTRY.

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Domestic Intelligence.**FLORIDA WAR.**

We publish below a copy of a letter received by the Secretary of War from Gen. Armistead, commanding the army in Florida, showing the nature and extent of the military operations against the hostile Indians since their recent faithless conduct in breaking off the negotiations entered into with them in pursuance of their own professed wishes. It will be seen that the Commanding General is vigorously pushing his operations against them, though he is at the same time seeking every opportunity of negotiating with them for the peaceable termination of the war, and their emigration to the homes of their brethren in the West.—*Globe*.

HEADQUARTERS ARMY OF FLORIDA,
Fort King, Nov. 24, 1840.

SIR: I have the honor to acknowledge the receipt of your letter of the 10th instant.

The whole army is now, and will remain, in pursuit of the enemy. Every inducement is however held out to them to treat. The bands of Halick Tustenuggee and Tiger-tail are pursued by a detachment of the 2d infantry. The 7th is now in the field. The dragoons, of which six companies are on the upper St. Johns, are actively employed in that section. The 8th regiment leaves this morning for Tampa, scouring the country on the route, embracing the Wahoo, and the other hiding places on the Withlacoochie. The 6th regiment is in the country between the Hillsborough and Withlacoochie. The 1st regiment is scouting along the Gulf shore below Tampa, with boats, accompanied by a steamer and two schooners.

I have deemed these movements necessary, as the entire bands of the enemy have confined themselves to the swamps and along that coast, from whence they make predatory excursions; and it is there, and there alone, that they can be most annoyed.

To the north of Fort King they make occasional inroads, but to bring them to the sense of what they ought to do, their families and strongholds must be broken up.

The delegation are in utter astonishment at the manner in which Halick Tustenuggee and his party left them, as they had given me and the party repeated assurances of their determination to emigrate. This want of faith has not deterred me from using exertions to communicate with the Seminoles, and I have despatched three of the delegation, with their consent, to hold intercourse with their relations and friends.

I will continue every exertion to fulfil the requirements of the Government, by treaty or otherwise.

I shall leave this place in a few hours for Tampa where my headquarters will be established; please direct accordingly.

I am, sir, very respectfully, your ob't servant,

W. K. ARMISTEAD,

Brig. Gen. Com. Army of Florida.

The Hon. the SECRETARY OF WAR.

From the Globe.

REVENUE CUTTERS ON WINTER SERVICE.—The following is a copy of an order recently issued in respect to the employment of the revenue cutter at Boston, Massachusetts. Similar orders have been issued to the officer designated to command during the cruise, in the cases of the Madison, at Wilmington, Delaware; the Taney, at Norfolk; the Van Buren, at Baltimore; and the Jackson, at New York; varying only as to the cruising ground, places where they are to obtain winter supplies, and to what port they are to return at the close of the cruise.

It is hoped that the efforts of these vessels will prove efficient in preserving many lives and much property, in the winter inclemencies, on our Northern coast.

TREASURY DEPARTMENT,
November 30th. 1840.

SIR: As the season is approaching when much suffering and distress experienced by vessels bound to ports of the United States, from long voyages, may be alleviated by the agency of the revenue cutters, while cruising on the coast, in discharge of the duties enjoined by law, I have thought it advisable to designate the revenue cutter Hamilton especially for that service, and to assign you to the command of her. Accordingly, you are directed to ship a sufficient crew, and to put the vessel in a condition for effective service.

To enable you to afford the required assistance to vessels and crews in all cases of distress, it will be proper that you should have an extra number of hands for the cruise, and that you should carry provisions, fuel, water, and other necessary supplies, in such quantities as can be conveniently stowed, and as, in your opinion, the necessities of the occasion may demand.

Thus prepared, you are directed to cruise on the coast as far north as Portland, and to call at Portsmouth occasionally, at least once in every month, keeping as close to the main land as may be consistent with the safety of the vessel, and not going into port oftener than you may be required to do so from stress of weather or want of supplies. On all such occasions you will immediately report to the Department the cause of such return to port. When supplies are required during the winter, you will of course obtain them at Boston.

While cruising you will speak all vessels approaching the coast which you may fall in with, and afford to those requiring aid or relief such assistance as may be adapted to their condition and necessities, and as it may be in your power to render.

And that any supplies thus furnished may be duly accounted for, you will charge them at the cost value, and take the bills of the masters of the vessels to whom they may be delivered, on their owners or consignees, for the amount.

After the severity of the weather shall have passed, you will return to Boston and deliver the bills thus taken to the collector for collection, who will be instructed how to dispose of the proceeds.

You will immediately report to the collector at Boston what supplies are needed before you commence your cruise, he having been instructed to provide them on your making such report to him.

I am, respectfully, your obedient servant,

LEVI WOODBURY,

Secretary of the Treasury.

Captain JOSIAH STURGIS, commanding the Revenue Cutter Hamilton, Boston, Massachusetts.

MILITIA AFFAIRS.

Extract from the message of

Gov. T. W. GILMER, VIRGINIA.

I submit the report of the visitors of the Virginia military institute, and after a personal inspection, I feel it to be my duty to recommend this institution to your very favorable consideration. Its officers and instructors seem to be peculiarly qualified for their stations. The school combines the method and discipline of the camp with the advantages of the lecture room. It is emphatically a State institution, where on very moderate terms, the benefits of a scientific and practical military education are imparted to the cadets of the Commonwealth, and to a number of young men who defray their own expenses. I found the public arms at the arsenal in excellent order. The cadets from this institution will annually be enrolled in our militia, and will contribute essentially to improve the present defective organization and discipline of this most natural and safe defence of a free country. I commend to you the suggestion of the librarian in his last annual report on the subject of a suitable library for this institution.

I recommend to your attention the defects in our militia system, noticed in the report of the adjutant general. The exact strength of our militia can never be ascertained under the imperfect returns which are now made. It is of the utmost importance that the duty of enrolling and reporting our entire force accurately, should be enjoined under adequate penalties, and that our rank and file should be distinctly arranged in corps according to the service for which they are designed. This is perhaps all that is attainable as to the body of our militia, in time of peace, without incurring a very serious expense and inconvenience, but I regard this as indispensable. In order to form the materials for a prompt and efficient force in time of war, it is necessary either to adopt a better plan for training our officers, or to organize our volunteer corps into one or more distinct brigades, capable of taking the field on an emergency and serving as rallying points for the troops of the line.

The swords voted by the general assembly to certain officers or their representatives have been at length completed, and suitable arrangements will be made for their presentation, when they are received.

I have received the resignation of brigadier general J. W. Pegram of the 15th brigade, occasioned by his removal from the limits of his command.

The work at the armory and on the quarters of the officers of the public guard has been executed according to the design of the last General Assembly. Many of the arms returned to the armory are in a condition unfit for repair. I have endeavored to require more frequent and rigid inspections of the arms distributed, but would recommend the subject as one which calls for your attention.

From the Citizen Soldier, Norwich, Vt.

ROSTER—VIRGINIA MILITIA.

Thomas W. Gilmer, Governor and Commander-in-Chief, Albemarle.

1st Div'n, Major Gen.	Joel Leftwich, Bedford county
2d " "	Wm. Gordon, Albemarle do
3d " "	Brisco G. Baldwin, Augusta do
4th " "	J. B. Harvie, Richmond city
5th " "	David Campbell, Washington co
Adjutant, Inspector, and Quartermaster General, with the rank of Brig. Gen. Bernard Peyton, Richmond city	
1st Brigade, Brig. Gen.	Thomas H. Botts, Fredericksburg
2d " "	Wm. Lambert, Richmond city
3d " "	Alexander Brown, Nelson county
4th " "	William Ligon, Powhatan do
5th " "	John R. Wallace, Fauquier do
6th " "	Asa Rogers, Loudoun do
7th " "	Samuel H. Lewis, Rockingham do
8th " "	John C. Crump, Nansemond do
9th " "	H. B. Woodhouse, Princess Anne do
10th " "	M. M. Chapline, Ohio do
11th " "	B. W. S. Cabell, Pittsylvania do
12th " "	David Rhodes, Lynchburg do
13th " "	Chas. P. Darman, Rockbridge do
14th " "	Philip Aylett, King William do
15th " "	Jas. W. Pegram, Petersburg
16th " "	James H. Carson, Winchester
17th " "	Peter C. Johnson, Washington co
18th " "	John Sloan, Hampshire do
19th " "	A. A. Chapman, Monroe do
20th " "	Isaac Booth, Randolph do
21st " "	Thomas H. Bayly, Accomack do
22d " "	P. H. Steenbergen, Mason do

There are in the State five regiments of cavalry, five of artillery, and 160 of grenadiers, light infantry, rifle-men, and infantry of the line, combined. Total strength in 1840, 105,522.

B. PEYTON,

Adj't Gen. of Virginia.

VERMONT MILITIA.

His Ex. Silas H. Jemison, Shoreham, Comd'r-in-Chief.
F. W. Hopkins, Rutland, Adjutant and Inspector Gen.
Davis Rich, Shoreham, Quartermaster General.
George C. Cahoon, Lyndon, } Aids-de-camp.
(Vacancy.)

APPOINTMENTS AND PROMOTIONS, TO 1st OCT. 1840.

To be continued.

FIRST DIVISION.

Martin Roberts, Manchester, Major General.
 Merritt Clark, Middletown, Inspector.
 Charles L. Williams, Rutland, } Aids-de-Camp.
 Dana Winslow, Pittsford.

FIRST BRIGADE, FIRST DIVISION.

John M. Potter, Pownal, General, Nov. 13, 1839
 Daniel Roberts, Manchester, Inspector, April 1, 1840
 Henry Vandersiegel, Pownal, Q'r M'r, July 13, 1840
 John Fay, Bennington, aid-de-camp, do do

FIRST REGIMENT.

Norman Blackmer, Bennington, Colonel, Jan. 8, 1840
 Franklin Dyer, Shaftsbury, Lieut. Col., do do
 Perez Harwood, Bennington, Major, do do
 John Fay, do Adjutant, Jan. 25, do
 Isaiah Mattison, Shaftsbury, Q'r M'r, do do
 Horace May, Bennington, Surgeon, do do
 Edward W. Hooker, do Chaplain, Aug. 1, do

CAPTAINS.

Barnard Golden, arty. Bennington, July 2, 1838
 Dennis I. George, lt. infy. Shaftsbury, Sept. 1, 1838
 Barber Thompson, rifle, Pownal, Sept. 20, 1838
 Wm. E. Hawks, 1st infy. Bennington, Jan. 24, 1840
 Thomas Riddle, 2d infy. do Aug. 8, 1837
 B. E. Brownell, 3d infy. Pownal, no return
 Andrew Cook, 4th infy. Stamford, April 16, 1836
 Willis Rice, 5th infy. Readsboro', June 6, 1837
 R. G. Blackmer, 6th infy. Shaftsbury, Feb. 17, 1837
 Henry R. Stone, 7th infy. Arlington, Sept. 28, 1839
 Wm. Alverson, 8th infy. Woodford, Aug. 22, 1838

F. W. HOPKINS,

Adj't and Insp. Gen. of Vermont.

JEFFERSON BARRACKS, (Mo.)

November 21, 1840.

To the Editor of the Globe.

SIR: I perceive, in looking over your paper of the 5th inst. an article inserted from the St. Augustine News of the 17th ult. saying, "We learn with extreme regret that Brigadier General Atkinson was stricken with paralysis, and there is little probability of his ever being able again to take the field."

This statement is erroneous. I am not nor never was, afflicted of paralysis; but on the contrary, am capable of taking the field, and of performing the duties appertaining to my rank. You will oblige me by giving this note an insertion in your paper; and I request that other editors who have published the paragraph from the St. Augustine News, will also give it an insertion in their respective papers, to relieve me from an insinuation that can but be injurious to my character for usefulness in my profession, as well as to relieve my distant friends from any uneasiness on the subject.

With great respect, gentlemen, your most obedient servant,

H. ATKINSON,

Brigadier General United States Army.

NAVAL DEPOT.—We have had the pleasure of a conversation with Captain POWELL of the U. S. brig Consort, now at anchor in our harbor, who informs us that his object is not a general survey of the coast of Florida, as we stated in our last, but an examination of the different ports on the Gulf with a view to ascertain the best position for the establishment of a naval depot. Not, probably to remove that already located at Pensacola, but most likely the creation of another. Capt. P. speaks highly of our harbor. He states that he came over the bar at the West Pass with 14 feet of water; and that depth can at all times be brought in, if not always carried out. He declares that our harbor is admirably adapted for a naval depot, and especially one consisting of steam defence; holding, as Capt. P. does, the opinion, that the Gulf could be much more successfully defended with steam ships than by forts.

The time has arrived when the people of the South should awake to a sense of their own insecurity, and

call upon Government to furnish them with a defence adequate to the extent and exposure of their splendid and valuable coast.

The Consort will sail in a few days on an excursion to visit and examine the harbors of St. Joseph, St. Andrews and Pensacola; she will find them beautiful bays, good harbors, and possessing fine depth of water, but devoid of those claims to defence which Apalachicola is able to prefer.

It should, and will, be borne in mind, that we export 80,000 bales of cotton; that our imports from Northern cities, from the West Indies, and from Europe, are heavy, and rapidly increasing; and that we have a population of 1,500 souls, and continually enlarging; and that, of consequence, we are justly entitled to as good a defence as our Government can erect upon the Gulf.

We trust that this subject will be kept alive.—*Apalachicola Journal*, 25th ult.

AN IMPOSING SIGHT.—There are at present lying at the anchorage off Town Point, abreast of the Naval Hospital, the U. S. ship Delaware, of 74 guns, Captain SKINNER, bearing the broad pendant of Commodore SHUBRICK; sloops of war Levant, commander SMOOT, of the W. I. squadron; York Town, commander AULICK, and Dale, commander GAUNTT, (dropped down from the navy yard yesterday morning) destined for the Pacific, and the steamer Pointsett, Lieut. Com. LYNCH. A fleet of small coasters which have made a harbor below, owing to the prevalence of a sharp North Easter, as viewed in the distance, add to the interest of the scene, and make the contrast more marked as well as the *coup d'œil* more picturesque.—*Norfolk Beacon*, Dec. 5.

NOTICES OF THE WAR OF 1812. BY JOHN ARMSTRONG, late a Major General in the United States Army, and Secretary of War. New York: Wiley & Putnam. 1840.—This is the second and concluding volume. The first was published sometime ago. These notices throw a good deal of light upon the history of the times to which they refer. They are very brief, clear, and characteristic of the pen of the writer. The account of the battle of New Orleans will be found very interesting, and the "remarks" and military criticisms not less so.—*N. Y. American*.

From the Pennsylvanian of Nov. 27.

THE MERCER SOLEMNITIES.—The ceremonies attending the reinterment of the remains of General Mercer yesterday, were of a truly imposing character, and were participated in by a large number of citizens and strangers, and witnessed throughout by thousands of persons. The day, contrary to the expectation created by the storm of the day before, was clear, and highly favorable for the purpose. At nine o'clock, the firing of a gun in Washington Square announced the removal of the remains from Christ Church, whence they were soon after taken under the escort of the First City Troop to the First Presbyterian Church. Here, according to previous arrangements, the coffin was placed in front of the pulpit, on either side of which were seated officers of the army and navy, the Governors of Pennsylvania, Virginia, and New Jersey, and Col. Mercer, of Virginia, son of General Mercer; the Mayor and Recorder and judges of our Courts. The galleries of the Church were filled with ladies, and the lower part by citizens and strangers. The members of the First City Troop occupied the seats immediately in front of the bier. The coffin was enshrouded in a large national flag, surmounted by a standard of yellow silk which was carried by the American troops at the battle of Princeton. The ceremonies in the church commenced by the singing of a hymn, "Our Land, O Lord, with songs of praise," which was followed by the reading of appropriate portions of the Scriptures, and an eloquent prayer by the Rev. Albert Barnes.

Wm. B. Reed, Esq., then pronounced a highly interesting oration upon topics connected with the occasion, in which he spoke of the ardent love of liberty exhibited by the sons of Scotland in all ages of our colonial existence, and of the rise, progress, and happy termination of our Revolutionary struggle, in which he dwelt with emphasis upon the individual character of General Mercer, and upon the various acts of his life, manifesting that devotion to freedom which was at last sealed with blood on the field of Princeton. The exercises were concluded by a benediction by the Rev. Mr. Carnahan of New Jersey. The remains were removed from the church, and the procession pursued its route in the following order, under the command of Generals Goodwin and Prevost:

	Banner.	
	St. Andrews Society.	
	Thistle Society, with Banner.	
1st City Troop.	Pall Bearers.	Coffin,
	Maj. Irving.	borne by
	Maj. Bache.	U. S.
	Capt Stockton.	Marines.
	U. S. Marines.	
	German Washington Guard.	
	Band playing Dead March in Saul.	
	Officers of the Army and Navy.	
	Mayor, Recorder, and members of the Corporation.	
	Governors of Pennsylvania, Virginia, and New Jersey.	
	Hearse drawn by four black horses.	
	Two private carriages, containing Col. Mercer and son.	
	Officers of 1st and 2d Division, P. M.	
	Troop of Lancers.	
	Junior Artillerists.	
	Band.	
	Pioneers.	
	Washington Artillery of Lancaster.	
	State Artillery.	
	Banners.	
1st and 2d company of German Washington Guards.		
	Washington Greys.	
	Pike Infantry from Trenton.	
	Philadelphia Greys.	
	Washington Cavalry of Holmesburg.	
	Germantown Blues.	
	Miffling Guards, of Rising Sun.	
	Governor's Guards.	
	Band.	
	Field and Staff Officers, mounted.	
	Jackson Artillerists.	
	National Greys.	
	Second Company State Fencibles.	
	Washington Blues.	
	Hibernia Greens.	
	Montgomery Hibernian Greens.	
	Band.	
	First Company State Fencibles.	
	Lancaster Fencibles.	
	Lafayette Light Guards.	
	York Riflemen.	
	Band.	
	Monroe Guards.	
	German Yeagers.	
	Mounted Staff officers.	
	Mechanic Rifle.	
	Montgomery Guards.	
	Roxborough Volunteers.	
	Staff Officers.	
	Pioneers.	
	Band.	
	Washington Artillerists.	
	Washington Guards.	
	Large train of carriages, and	
	Citizens on horseback.	

The flags in the harbor, and throughout the city, were displayed at half mast, the old continental bell in the State House was tolled, and five-minute guns were fired in Washington Square, during the march of the procession. The streets, windows, and every available point along the route were thronged with spectators.

On arriving at the corner of Ridge Road and Coates street, the military left the line, and the remainder of the procession took carriages, and, escorted by the 1st City Troop, proceeded to Laurel Hill Cemetery, where the patriotic solemnities of the occasion were concluded by depositing the coffin in the tomb prepared as the last resting place of one of the most distinguished martyrs in the cause of American independence. In conclusion, it may not be amiss to say that the arrangement of these solemnities was excellent throughout. It was also a matter of general remark, that Philadelphia has not for many years witnessed a parade so soldier-like and elegant in its details and general effect.

GENERAL MERCER.—The remains of this gallant officer and accomplished gentleman were on Tuesday afternoon disinterred at Christ Church grave yard, on the south side of the church, from the grave in which they have reposed for upwards of sixty-three years. The bones were found in an extraordinary state of preservation—the skull entire, bearing no mark of fracture, and containing an entire set of teeth. Of the coffin only a few small pieces of the wood remained, but the plate and the handles were in good preservation. From a measurement of the frame, which was found peacefully reposing in its kindred earth, it appears that General Mercer in life was about five feet ten inches in height. Phrenological notes were carefully taken by Dr. Mitchell; after which the remains were placed in a new coffin, preparatory to their reinterment at Laurel Hill.

[North American.]

From the Boston Courier.

BLASTING ROCKS UNDER WATER BY MEANS OF THE GALVANIC BATTERY.

We thank the writer of the following letter for his attention in furnishing us with a copy for publication. It will be read with interest by the student in science, and those who appreciate the skill of so ingenious and successful a mechanic as the writer.

NAVY YARD, PORTSMOUTH, N. H. }

November 9, 1840. }

DEAR SIR: Knowing the great interest you have always manifested in all engineering operations connected with the construction of public works, it affords me pleasure to communicate to you an account of the transactions within the past summer at this navy yard, in blasting rocks under water, by means of the galvanic battery.

The application of this means to purposes of blasting, is somewhat novel, as you are well aware, and the account of Colonel Pasley's experiments in England has given to the public the first notice of its being thus employed. Since the blowing up of the wreck of the Royal George, it has been successfully used in England in blasting rocks and clearing harbors, rivers, &c. from obstructions; it bids fair to entirely supercede the old methods of blasting, both in civil and military operations, especially in the latter, where it becomes a tremendous agent for the instantaneous explosion of mines, &c.

In the detailed accounts of the experiments tried by Colonel Pasley, it appears that at first many difficulties were encountered; and the numerous failures seemed to forbid any hope of success in large operations, although the result of those on a smaller scale generally proved satisfactory. Perseverance, however, enabled the operators after many trials, to render the explosion of the charge under water as certain as by the ordinary methods on dry land; and the subsequent

success in blowing up sunken wrecks, &c. at the bottom of the Medway river, and at Spit Head, proved the utility of the means, and amply compensated for the labor and expense incurred in the first attempts.

Our operations during the past season were confined chiefly to the construction of quay walls, and the foundation of two launching ways, the whole of which were built of stone. The character of the bottom of the river where the work was laid, rendered blasting or other means necessary, before a proper surface for the foundation could be obtained; it was desirable to give it a slight inclination inwards, so that the face of each course of stone should lie somewhat higher than the inside, thus preserving a proper batter of the walls, and rendering them perfectly secure. This bottom is a hard slate rock, and, with the exception of some level portions, extremely uneven, with slopes of almost every grade, generally in an outward direction from the shore. The depth of water in the line of the walls varies from fifteen to twenty feet at low water, and from twenty-five to thirty below the high tides. This depth of water, added to a strong and variable current, caused me to anticipate much difficulty and great expense in all operations below its surface.

But we were fortunately provided with a fine diving apparatus, consisting of a cast iron diving bell, and a powerful air pump attached. This apparatus was worked from a vessel of strong construction and light draught, fitted expressly for the purpose. A system of signals and messengers was established for communication between the workmen in the bell and those on board the vessel; by these means every want was speedily made known and answered. Four workmen, divided into two gangs, were employed for working in the bell, which made four descents per day, occupying at each time two and a half hours, the two gangs alternately relieving each other. The bell was amply supplied with a constant stream of fresh air, and but two or three inches of water remained in it at its greatest depth, so that the men worked in a comfortable state, perfectly dry, and with no more difficulty of respiration than on dry land.

In deciding upon the best means for preparing the bottom for the reception of the foundation of the walls, I was greatly at loss which to adopt. It appeared to me that in adopting the method practised by Colonel Pasley, great expense and difficulty would be incurred; and as it did not appear that this method had been employed in blasting the solid rock at the bottom of a river, in any of his experiments, I was somewhat apprehensive of its utility for operations of this kind, and whether the cost would justify the trial. In order to satisfy myself with regard to the expense of an experiment with the galvanic battery, I applied to Mr. Daniel Davis, Jr., philosophical instrument maker, of Boston, for the necessary information, when I was convinced that a very trifling expense would procure such a trial as would satisfactorily decide the merits of the apparatus. Mr. Davis kindly assisted me in making the experiments which were tried at the Navy Yard at Charlestown, and I had the pleasure of witnessing the most satisfactory results, and without hesitation determined to apply the means to the work in hand.

The galvanic battery which was constructed by Mr. Davis was one of Dr. Hare's invention, of Philadelphia. It consists of two vessels or jars, each formed by two concentric cylinders of copper, admitting of a cylinder of zinc between. Two copper wires, termed the conducting wires, formed the medium by which the electric fluid was communicated to the charge from the battery. These wires were closely wound with thread, in order to prevent their coming in contact with each other, and both tightly covered with tape, and afterwards served round with twine, thus forming a single coil. At each extremity of the coil the wires were separated for a few inches

like a fork. This form of the galvanic battery, termed by Dr. Hare the "Calorimeter," is the most simple and portable of any that I have seen; its power for blasting gunpowder may be increased to any required degree, either by enlarging the size of the jars or increasing their number. We had, in addition to this apparatus, a simple contrivance for proving the charges of powder, which is termed the "Electrometer."

The charges used in blasting consisted of various quantities of gunpowder, according to the effect required, from four ounces to a pound. They were enclosed in perfect air tight tin canisters, the smallest being an inch and a quarter in diameter, and the diameter of the largest about two inches; the length of the canisters were eight or nine inches. Two copper wires were introduced into the canister about half way down, with the extremities connected by a fine platinum wire, the other ends of the wires projected twenty or twenty-five inches beyond the mouth of the canister, which, after being filled with powder, was closed and effectually secured with a water-proof composition. It will be observed, in thus preparing the charges, that the whole is completely air and water tight, and that no vent to the powder remains, an advantage of which I shall further speak.

The operation of blasting is carried on in the following manner: The hole in the rock for the reception of the charge is drilled to a proper depth by the workmen in the bell; the canister is then inserted with the end of the copper wires extending outside of the hole, which is then filled up or tamped with coarse sand. The ends of the conducting wires are then connected by means of clamps to the wires leading from the charge; the other end of the coil is then led up, as the bell is hoisted to the surface, to the battery, which in all our experiments was placed on a floating stage directly over the charge. The jars forming the battery are brought near each other, and their whole power concentrated by connecting them together with a short copper wire; the end of one of the conducting wires is then brought in contact with one pole of the battery, and the end of the remaining wire similarly disposed with the other pole, when the explosion instantly follows by the platinum wire in the charge becoming intensely heated as the electrical current passes through the conducting wires.

We made during the past season nine blasts, with but one failure, which was caused by the platinum wire in the charge becoming accidentally broken, so as to render the electrical circle incomplete; this probably occurred in tamping, an operation which must be conducted with care, as this accident is most liable to be incurred, of all others, owing to the extreme delicacy of the wire. The object of the electrometer is to detect whether this has taken place before the charge is inserted in the rock, and may always be ascertained by a simple trial.

It must be obvious to every one, at all experienced in blasting rocks, that this method has advantages in many respects over the old methods, both under and out of water. The danger of accidental explosions is entirely prevented; these occur, for the most part, in the old practice by carelessness, while in this, great care and nicety are required to produce the explosion. There is very little time required in charging, as the canister is simply inserted in the hole, and tamped with sand; the whole time occupied in this operation, and making the connection with the conducting wires in the present cases, rarely exceeded twenty minutes. There is great expense and trouble saved in the absence of the train or fuse, which was indispensable in the old methods, especially under water, where was always required a water tight hose or tube leading to the surface, which was always destroyed by the explosion. Here nothing is lost or injured, except the canister containing the charge. The explosion of the charge is reduced almost to a certainty, and should cases of failure occur, it can be

approached with safety, without the suspicion that fire may be near it. The most important advantage in an economical view, is that the effect of the charges is much greater than in the old way, in consequence of there being no vent hole, the whole explosive force of the powder is thus gained, while by the old methods much of it is lost. Our smallest charges displaced a much greater quantity of rock than the same amount of powder by the old means, which we had opportunities of experiencing. With these advantages, this method of blasting places in our hands the most ample means of clearing harbors and rivers of rocks, &c. in any reasonable depth of water.

In using Dr. Hare's apparatus, it appeared that an important advantage was gained over that of Professor Daniell's, employed by Col. Pasley, inasmuch as a very troublesome arrangement, indispensable in the latter, was avoided. This consisted in not being obliged to insulate the conducting wires from the water, as in such a case the connection of the conducting wires with the charge must be made before the canister is placed in the rock; every portion, then, of the wires, where the connection is made, must be covered with the water-proof composition. By Professor Daniell's apparatus, it appeared that water was a conductor, thus destroying the electric circle, if any part of the conducting wires came in contact with it.

Though Dr. Hare's battery was known to Col. Pasley, it was not adopted in his experiments, the reason assigned being that "it did not appear that he had ever used it under water."

I have the honor, sir, to be

Your obedient servant,

ALEX'R PARIS, *Civil Engineer,*

Col. S. THAYER, Boston.

From the New York American.

FROM RIO JANEIRO.—The brig *Firm* arrived yesterday, and brings advices to the 9th of October. The U. S. brig *Enterprise* had arrived at Rio from Bahia, with the *Malek Adhel*, which vessel the U. S. Consul at Bahia had seized, on suspicion of being a piratical vessel. We find in the *Journal of Commerce* the following particulars of the seizure, from the *Journal de commercio*.

"It appears that the *Malek Adhel* touched at Fayal, was bound to the Pacific, and put into Bahia for supplies. If we are rightly informed, the crew confess that she fired at some merchant vessels, and it is said the captain of the *Malek Adhel* does not deny it. This individual abandoned his vessel at Bahia, and is now in this city. We understand he attempts to exculpate himself by saying that he fired upon said vessels to bring them to, in order to compare and regulate the chronometers!" The same paper of the next day, October 9th, contains a card from Joseph Nunez, Captain of the *Malek Adhel*, in which he denies that he abandoned his vessel at Bahia, but states that she was seized by the *Enterprise* in the night, when he and two passengers were on shore. He further states that he had brought with him all his papers in due form, and a passport from the Brazilian Government, which he would exhibit to the public in due time.

SHIPS OF VARIOUS NATIONS IN THE MEDITERRANEAN.—The *Commerce* contains a letter from Toulon, announcing that the effective force of the French Levant fleet, commanded by Admiral Duperre, would be 15 sail of the line, 4 frigates, 6 light vessels, and 2 steamers. "This force," says the writer, "will be sufficient to balance that of the English until their junction with the Russians. The squadron of reserve, which is to cruise between Toulon and Algiers, will consist, in the course of a month, of 19 sail—viz., the *Souverain* and the *Ville de Marseilles*, ships of the line, now at Toulon; the *Inflexible*, the *Friedland* and the *Jemappes*, which were expected from the

Atlantic ports; of 6 frigates, 6 light vessels, and 2 steamers. With this," adds the *Commerce*, "we shall be able, in case of need, to sink the English divisions which may be sent to join the Levant squadron, and, if it does not arrive too late, to stop the passage of the Russian fleet. The naval forces assembled in the Mediterranean will soon amount to 68 ships of the line, and 209 frigates, corvettes, brigs, and war steamers—viz., French, 20 sail of the line, 10 frigates, and 90 light vessels; English, 16 ships, 4 frigates, and 20 other vessels; Russian, 10 ships, 11 frigates, corvettes, and brigs; Austrian, 2 frigates, and 5 other vessels; Egyptian, 17 ships, and 40 other vessels; Turkish, 3 ships, and 10 frigates, corvettes, and brigs; American, 1 ship, 1 frigate, and 1 corvette."

Correspondence of the N. Y. Journal of Commerce.

LONDON, Nov. 3, 1840.—The naval armament of England has not been arrested by the pacific aspect which affairs have assumed with our neighbors, for, notwithstanding the immense increase of the number of vessels in commission which I announced in my last, the following have been officered this week. The *Endymion*, 38 guns, Capt. Hon. F. W. Grey; the *Iris*, 28, Capt. Hugh Nurse; the *Tweed*, 20, Commander H. D. C. Douglas, and the *Pelican*, 16, Commander C. G. E. Napier. The last named gentleman is the adopted son of Commodore Napier, and the commission for the *Pelican* was enclosed to Mrs. Napier, with a very handsome letter expressive of the warm approbation of the sovereign and the government, of her husband's conduct on the Syrian coast. This is the first list of promotion that has taken place during the struggle, of any of the officers who have been engaged in the same. Young Napier was only out there for a very short time.

The court martial upon the carpenter John Henty for having set fire to the *Camperdown* in Sheerness dock yard, terminated in the following finding of the court; Not guilty of the charges alleged against him except that of having made a false report to his superior officer, Captain Sir I. Hill, of the extent of the fire, but from the circumstances "of his extraordinary good character for skill, zeal, carefulness, humanity, and general good conduct," he was sentenced to be admonished, which was accordingly done. The result appears to have given great satisfaction among all classes at the dock yard; that is the acquittal of the prisoner from all the more serious accusations, seems to have been not only desired, but generally anticipated. By this finding, the setting fire to the *Camperdown* is still involved in mystery—a mystery which it is my opinion John Henty alone can clear up, though it is far from me to accuse him of any felonious intent.

The infamous conduct of the Earl of Cardigan and the sentence of the court martial upon Capt. Reynolds, monopolize public feeling at the present time to a most extraordinary extent. I never knew such a powerfully expressed feeling from all classes and conditions. The gallant captain has, in a letter of great power and nobleness of spirit, declined a public subscription.

J. W. G.

WRECK OF THE "ROYAL GEORGE."—Amongst the curiosities recovered have been some of the surgeon's implements, the brass pans of his scales being perfect, though very thin, as well as the brass chains by which they were hung, but with all the work gone. Next to brass, the most durable article found has been silk; for besides pieces of cloaks and lace, a pair of black satin breeches, and a large satin waistcoat with flaps, were got up, of which the silk was perfect, but the lining entirely gone, as well as the buttons, from the thread giving way. No articles of dress of woollen cloth have yet been found, and therefore we may presume that they have all decayed. Some pieces of leather have been recovered from time to time, but none in a perfect state.

Military Intelligence.

Officers of the Quarter Master's Department and their stations, December 1, 1840.

Bvt. Maj. Gen. & Qr. Mr. Gen. T S Jesup, Washington city.

Colonels and Asst. Qr. Mrs. General.

Henry Stanton, Inspecting the affairs of the Dep. in Florida.

Trueman Cross, Washington city.

Lt. Col's. and Dep. Qr. Mrs. Gen.

Henry Whiting, Detroit, Mich.

Thomas F Hunt, Pilatka, Flo.

Quarter Masters and Majors.

Isaac Clark, New Orleans.

Aeneas Mackay, New York.

Charles Thomas, Fort Smith; under orders for Flo.

Samuel McRee, St. Louis.

Captains and Assistant Quartermasters.

D D Tompkins, Philadelphia.

C A Waite, Garey's Ferry, Flo.

Thomas Swords, Fort Leavenworth, Mo.

G H Crosman, Purchasing horses and mules in Georgia for Florida service; under orders for Florida.

S B Dusenbery, Baltimore.

D H Vinton, Sacket's Harbor, N. Y.

E B Alexander, Fort Smith, Ark.

F Searle, Disabled by wounds—on leave.

Osborne Cross, New Orleans.

S P Hientzelman, St. Mark's, Flo.

J R Irwin, On special service.

M M Clark, Savannah, Geo.

E S Sibley, Fort Fanning, Flo.

E B Babbitt, Assigned to duty in Flo.

J P Davis, Fort Gibson, Ark.

B A Terrett, Assigned to duty in Flo.

R E Clary, Pilatka, Flo.

C O Collins, Houlton, Me.

A R Hetzel, Washington city.

R S Dix, Boston.

E A Ogden, Tampa Bay, Flo.

J M Hill, Charleston, S. C.

D S Miles, Baltimore; superintending building of steamboat for Florida service.

W S Ketchum, Attached to Gen. Reid's command in Florida.

J H Stokes, Fort King, Flo.

A C Myers, St. Augustine, Flo.

S M Plummer, Cedar Keys, Flo.

W M D McKissack, Assigned to duty in Florida.

Topographical Engineers.—Lt. Col. Kearney, under orders to complete survey of boundary line between the U. S. and Texas. Captain A Canfield, at Washington, preparing maps of surveys on lakes Ontario and Huron. Captain C Graham, with Lieut. W R Palmer, as assistant, at Baltimore, preparing maps of surveys of Suwannee and Yellow rivers. Captain T J Cram, surveying boundary line between Michigan and Wisconsin. Capt. H Stansbury, in charge of improvement of Cleveland and other harbors on Lake Erie. Lieut. T B Linard, under orders to superintend improvement of Mobile harbor. Lieut. T J Lee, under orders as assistant to Col. Kearney. Lieut. J H Simpson, in charge of harbor of Erie, Pa. Lieut. A P Allen, in charge of harbors on Lake Ontario. Lieut. C N Hagner, in charge of improvements of harbors at Michigan city, Ia., and St. Joseph's, Mich. Lieut. Geo Thom, assistant to Major Baché, Philadelphia.

1st Dragoons—Lieut. A R Johnston relieves Capt. Rains on dragoon recruiting service, at New York.

1st Artillery—Fort Preble, Portland, Me., has been garrisoned by company E, under command of Capt. G Porter. The rendezvous at Bangor has been closed, and Capt D Van Ness is on regimental recruiting service at Augusta, Me. A detachment of 70 recruits, under command of Lieut. H D Grafton, left the depot at New York, on the 25th Nov. for head quarters at Houlton, Me.

4th Artillery—Lieut. E Bradford has changed his rendezvous from Masillon to Sandusky, Ohio.

4th Infantry—Fort Smith, Ark., has been garrisoned

by Major W W Lear's company E,—Fort Towson by Capt. G W Allen's company K,—and Fort Jesup by Capt. P Morrison's company G. Lieut. H Prince, recruiting at New Orleans. A detachment of 67 recruits, under command of Lieut. H L Scott, arrived at Fort Smith, on the 16th Nov., intended for the two companies at that post and at Fort Towson.

6th Infantry—Lieut. J B S Todd has joined the depot at Newport, Ky., on temporary duty.

7th Infantry—Capt. G J Rains, ordered to report at New Orleans barracks.

NAVY.**ORDERS.**

Dec. 2—Mid. C S Macdonough, naval school, Phila.

3—Lieut. W E Hunt, Rec'g ship, New York.

P. Mid. E Lanier, detached from Rec'g ship, Norfolk, with leave 3 mo's.

Lieuts. W D Newman, E M Yarrl, detached from ship Preble, with 2 mo's leave.

MARINE CORPS.

Oct. 2—2d Lieut. R. D. Taylor, ordered to join the schr. Wave at Key West, with orders to relieve Lieut. Terrett in the command at Indian Key, E. F., on the arrival of the Wave at that place.

31—1st Lieut. J. G. Reynolds, ordered to report to Commo. Downes, as the senior and commanding marine officer on board the frigate Constellation.

Nov. 2—2d Lieut. E. L. West, ordered to report to Lt. Col. Freeman, at the navy yard, Charlestown, Mass., for duty.

2d Lt. Isaac R. Wilson, ordered to report to Commo. Stewart, at Philadelphia, for duty on board the schr. Flirt.

Nov. 10—Capt. A. N. Brevoort, ordered to Pensacola, to relieve Lieut. Williams in the command of the marines at that place.

1st Lieut. A. H. Gillespie, ordered to Pensacola, to attend to such duties as the quartermaster and paymaster of the corps may require of him on that station.

13—2d Lieut. A. S. Taylor, ordered to report to Lt. Col. Miller, for duty at Philadelphia.

18—1st Lieut. D. D. Baker's leave of absence extended for two months.

23—Capt. J. G. Williams, ordered to report at Head Quarters when relieved by Capt. Brevoort.

PROMOTIONS.

Nov. 19—Capt. Levi Twiggs, to be Major, to take rank from the 15th Nov., vice Broom, deceased.

1st Lieut. Job G. Williams, to be Captain, to take rank from the 15th Nov., vice Twiggs, promoted.

Nov. 1—2d Lieut. Thomas T. Sloan, to be 1st Lieut., vice Watkins, deceased.

2d Lieut. Addison Garland, to be 1st Lieut., to take rank from the 15th Nov., 1840, vice Williams, promoted.

APPOINTMENTS.

Nov. 4—Robert Tansill, of Virginia, to be 2d Lieut., vice Sloan, promoted.

John J. Berret, to be 2d Lieut. Nov. 15, 1840, vice Garland, promoted.

DEATHS.

Major and Bvt. Lt. Col. Charles R. Broom, at Washington, D. C., on the 14th Nov., 1840.

1st Lieut. Thos. L. C. Watkins, at Brooklyn, N. Y. on the 31st Oct., 1840.

Naval Intelligence.**U. S. VESSELS OF WAR REPORTED.**

Store ship Relief, Lieut. Com'g J. S. Nicholas, sailed from New York on the 1st Dec., for Rio Janeiro and the Pacific. Officers: Lieut. Com'g, John S. Nicholas; Lieut. B. Shepard; *Act'g Master*, J. L. Worden; *Passed Ass't Surgeon*, Ninian Pinkney; *Purser*, and *special Storekeeper*, Edward Storer; *Passed Mid. W. Gwathmey*; *Mid. W. W. Polk*; *Purser's clerk*, L. Byers; *Storekeeper's clerk*, Louis-Baker.

Schr. Wave, Lieut. Com'g J. Rodgers, sailed from St. Augustine, Nov. 26, on a cruise south.

MARRIAGES.

In Newnansville, E. F., Oct. 26, by the Rev. J. J. Prevatt, Lieut. J. W. ANDERSON, of the U. S. army, to ELLEN M. daughter of the late Capt. E. D. BROWN, of Portsmouth, N. H.

In Norfolk, on the 26th Nov., JAMES D. JOHNSON, of the U. S. navy, to Miss MARTHA E. daughter of the late COPELAND PARKER, Esq., of that borough.

In Mobile, Ala., on the 8th ultimo, P. Mid. JOHN NEWLAND MAFFIT, U. S. N., to Miss M. FLORENCE MURRELL.

In Bristol, Pa., on the 1st inst., Lieut. LLOYD B. NEWELL, of the U. S. navy, to SARAH, only daughter of Capt. JOHN HEISS, of B.

In Norfolk, Va., on the 2d inst., J. JULES GUTHRIE, of the U. S. navy, to Miss SARAH LOUISA, eldest daughter of BENJAMIN SPRATLY, Esq., of Portsmouth, Va.

Near Wilmington, N. C., Lieut. WILLIAM HENRY WRIGHT, of the Corps of Engineers, U. S. A., to Miss ELIZA ANN, daughter of the late JOHN R. LONDON, Esq.

In Richmond, Va., on Sunday morning, Dec. 6, at Monumental Church, by the Rt. Rev. Bishop MOORE, JOHN CONTEE, of Maryland, of the U. S. navy, to MARY L., daughter of CHARLES D. BRODIE, Esq., of Mobile, Ala.

In Annapolis, Md., on the 5th inst. Lieut. HENRY S. BURTON, of the U. S. Army, to ELIZABETH F., eldest daughter of the late Dr. SAMUEL B. SMITH, of the U. S. army.

DEATHS.

At Fort Holmes, (E. F.) on the 16th ult., of cholera infantum, ANGELICA, aged nine months, daughter of Lieut. J. MCKINSTRY, U. S. A.

Of congestive fever, at the residence of his brother, R. B. GREGORY, Jacksonville, E. F., on the 19th Nov., ASA PARK GREGORY, in the 27th year of his age, (a graduate at West Point, and late a lieutenant 3d artillery, U. S. A., which station he resigned for the profession of the law, his ill health rendering a civil preferable to a military life.) junior son of SAMUEL GREGORY, Esq., of Montrose, Penn.

At Philadelphia, on the 20th ultimo, NICHOLAS STEINBOGH, aged 56, Boatswain U. S. navy.

EDWARD OWEN and **EVAN EVANS**, heretofore trading under the firm of E. OWEN & Co., have taken into partnership JOHN S. OWEN. The firm will hereafter be known as that of OWEN, EVANS, & Co. They feel grateful for the very liberal patronage with which they have been favored; at the same time that they have to request that all those indebted to them, call and settle the same, either by note or otherwise, without delay, as it is essentially necessary that the business of the late firm be closed.

OWEN, EVANS, & Co., Military & Naval Merchant Tailors, Pennsylvania Avenue (near Fuller's Hotel) Washington city, beg leave to state to their patrons of the army and navy, that by recent arrangements with a London Military & Naval Embroidery Warehouse they are enabled to make up uniforms in a style not surpassed by European manufacturers.

They keep constantly on hand, the following very superior articles.

Rich Gold Embroideries, Army and Navy
do do Epaulettes do do
do do Embroidered scales do do
Swords, Belts, & Knots, Army and Navy
Rich Gold Lace do do and
Marine Undress Caps, new Regulation.

With a full assortment of ornaments for the Staff, Topographical Engineers, Dragoons, Artillery, Infantry, &c.

Nov. 5—tf

MILITARY EQUIPMENTS.

Just received from France a case of GOLD EMBROIDERIES &c., consisting of Embroidered SWORD-BELTS, COLLARS, CUFF and SKIRT ORNAMENTS, for uniforms of Military Engineers; also, a complete assortment of EPAULETTES, for Lieutenants, Captains, Majors, and Colonels, and for sale, cheap for cash, by

J. SMITH FRASER,

168 Pearl Street, New York.

N. B. Military and Topographical Swords just received.

Sept. 3—tf

VICTORIA HOUSE,

No. 189 King, corner of Princess-Street,
CHARLESTON, SOUTH CAROLINA.



The subscriber respectfully informs his friends and the travelling public generally, that the above extensive and splendid ESTABLISHMENT having undergone various improvements during the past season, he is prepared to accommodate them with permanent or transient BOARD, in the handsomest style; and in addition to his former arrangements, he has fitted up a new and elegant DINING-ROOM, capable of conveniently accommodating 100 persons.

CHAS. P. FRAZER.

CHARLESTON, August 1st, 1840.

N. B. The U. S. Ass't Quartermaster's office kept here.

Sept. 3—6t

ARMY, NAVY, AND MARINE UNIFORMS.

JOHN SMITH, (late of West Point,) would respectfully inform the officers of the army and navy, that he is now enabled to furnish to the different corps their uniform complete, all made of the best materials, and forwarded with despatch.

To prevent errors, the Legislature of New York has authorized him to change his name to JOHN S. FRASER; therefore all letters hereafter will be addressed to JOHN S. FRASER, March 5—tf 168 Pearl street, New York.

COLT'S PATENT REPEATING FIRE ARMS.

FOR SALE AT THE STORE OF THE PATENT ARM^S MAN'G. CO.

No 155 Broadway, New York City.

At retail, at the following prices, according to style and finish, viz; Rifles, with Equipments complete, and 2 Receivers 8 charges each, \$50 to 150.

Shot-guns and Carbines, with Equipments complete, 6 charges each, \$40 to 100.

Boarding and Holster Pistols, with Equipments complete, and 2 Receivers 5 charges each, \$30 to 75.

Belt Pistols, with Equipments complete, and 2 Receivers 5 charges each, \$20 to 50.

Pocket Pistols, with Equipments complete, and 2 Receivers 5 charges each, \$18 to 40.

If a quantity of arms is wanted, in amount above \$500, the Company will make a handsome deduction in the above prices; and take in payment approved city of New York acceptances at 90 days.

Sept. 3—ly

MILITARY AND NAVAL ORNAMENTS.

B. DELAPIERRE, Importer and Manufacturer of Military and Naval Ornaments, and embroiderer in gold and silver, 90 Fulton street, New York, begs leave to tender his services to the Officers of the Army and Navy, in the line of his profession. Epaulettes, and other ornaments, are there to be had of the best kind, and most substantial workmanship.

B. D. has imported from the most celebrated military clothing establishments in London, a small lot of the identical blue Silk Velvet, used in the British service for the corps of Topographical Engineers, a sample of which is deposited in the cloth-bureau at Washington, and has been approved of by the chiefs of the corps.

May 2 —tf

U. S. NAVAL BENEVOLENT ASSOCIATION.

AT a special meeting of the U. S. Naval Benevolent Association, held at the Navy Yard, Charlestown, Mass., Oct. 26th 1840, on motion it was voted,

That all delinquent members be notified in writing, that unless the amount due from them to the Association be paid, on or before the annual meeting on the first Monday in October, 1841, they will have forfeited their membership by the Constitution, and will no longer be considered members of the Association.

That the Secretary give this vote publicity through the Army and Navy Chronicle.

THOS. O. SELFRIDGE, Secretary of
the U. S. N. Benevolent Association.

Dec. 10—4t

SEMAPHORIC TELEGRAPH.

Just received, and for sale at the office of the Army and Navy Chronicle,

JOHN R. PARKER'S SEMAPHORIC TELEGRAPH SIGNAL BOOK and UNITED STATES TELEGRAPH VOCABULARY, in Three Parts; containing,

The Marine Telegraph and Holyhead systems of conversation, adapted to the use of the Semaphoric Telegraph, embracing 30,000 words, phrases and sentences, numerically arranged for conversation between vessels at sea; as well as communications on shore;

The Marine Telegraph Register, of 2,000 vessels which have adopted the Semaphoric system of communication with the Marine Telegraph flags.

Sets of flags, with a designating number and Signal Book, supplied by

June 1—6m

B. HOMANS,
Agent for the Proprietor.

OFFICIAL NAVAL REGISTER, for 1840.—A few copies for sale at this office.

Ap. 2